

205  
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537

SOKOLOV, V.S.



SOKOLOV, V.S. inzhener, nachal'nik; MOLOKANOV, K.P., doktor meditsinskikh nauk; LETAVET, A.A., professor, deystvitel'nyy chlen Akademii meditsinskikh nauk SSSR, direktor.

Use of television in roentgenology. Vest.rent.i rad. no.2:54-56 My-Ap '53. (MLRA 6:6)

1. Institut gigiyeny truda i professional'nykh zabolevaniy Akademii meditsinskikh nauk SSSR (for Molokanov and Letavet). 2. Akademiya meditsinskikh nauk SSSR (for Letavet). [3. Tsentral'naya ispytatel'naya stantsiya metallov Ministerstva elektrostantsiy (for Sokolov).] (Diagnosis, Radioscopic) (Television)

1. БОЖОЦОВ, В. П., Док.
2. USSR (600)
4. Ultrasonic Testing
7. Supersonic detection of defects in materials without surface processing.  
Elek. sta., 24, No. 1, 1953.

States hf ultrasonic pulse defectoscopes cannot detect large defects in metals, especially when in motion. Says instruments operating on 50-600 kc were developed at Central Metals Testing Station, State Inspectorate for Steam Boilers. Gives photos of 2 instruments, 1st in 2 units (transmitter, receiver) with separate rectifiers, 2d in 3 units (transmitter, receiver, rectifier) plus circuit diagram of 2d. Mentions applications in sheet-rolling mills, tire plants. 255Th6

9. Monthly List of Russian Accessions, Library of Congress, May 1953. Unclassified.

SOLOKOV, V.S.

U S S R .

2363. Determination of the humidity of coal with an electrical humidity meter. M. A. BERLINER AND V. S. SOLOKOV. *Elekt. Stantsii*, 1954, No. 11, 11-13. In Russian.

521.317.39 : 662.5

The meter described is adapted from an instrument produced for measuring water content in corn and cotton. It operates on 6-160 V d.c. or 120-220 V a.c. and employs a single valve, a 6E5 tuning indicator. The triode is operated as a crystal-controlled 1.5 Mc/s oscillator, the anode load consists of a resonant circuit containing coarse and fine tuning condensers. The material to be investigated is introduced as dielectric into a capacitive probe across the circuit, and the readjustment of the calibrated condenser restores resonance, indicated by the "tuning eye's" fluorescent screen closure. The construction of the probe is described, illustrated by a cross-sectional drawing, also the calibration procedure and the obtainable accuracy. Typical measurements are reproduced in several graphs.

A. LANDMAN

50K060V, V.S.

REFERENCE: "HYGROMETER TO DETERMINE MOISTURE BY ELECTRIC HYGROMETER"  
 1954, No. 1, 1-13. (Elektr. Hygrometry, Moscow), Nov.  
 1954, No. 1, 1-13. The principle of the electric hygrometer  
 is based on the fact that a certain amount of moisture is utilized in the hygrometer  
 chamber, which was previously conditioned for use with grain and cotton.  
 In this case, the hygrometer is based on a variation of a 1.5 K/s  
 signal, which is used as an electronic testing indicator. Numerous tests  
 have been conducted and it has been established that for a given type of seed the  
 difference between the electric hygrometer readings and results by drying  
 can also not exceed 0.3-0.5%, which is usually permissible. Advantages  
 of the hygrometer are: the short duration of the test (1-2 min) and  
 simplicity of application.

D.E.A.

KARDASH, Ye.G., inzhener; SOKOLOV, V.S., inzhener.

Instrument for controlling the soil content in dredged material.  
Elek.sta. 25 no.2:18-19 F '54. (MIRA 7:2)  
(Measuring instruments) (Dredging)



*Sokolov, V.S.*

*Handwritten signature*  
*2529*

2529. USE OF ATOMIC ENERGY FOR TESTING, INVESTIGATION AND REGULATION OF  
PROCESSES IN POWER PLANTS. Sokolov, V.S. (Elekt. Sta. (for Sta. Moscow),  
Apr. 1956, 4-9). The principles are explained and the following applications  
are described: investigation of the composition, movement and pressure of  
gases and steam, and indication of change in the state of a gas, liquid or  
solid. One specific use mentioned is the continuous determination and control  
of the proportion of pulverized fuel in a fuel-air mixture going to a boiler  
furnace. (L).

*Handwritten signature*

SOKOLOV, V.S., red.; OZERETSKAYA, A.L., red.izd-va; MIKHAYLOVA, V.V.,  
tekhn.red.

[Standards for macrostructure control of butt joints made by arc  
welding of carbon steel in boilers] Etalony dlia makrostrukturnogo  
kontrolia stykovykh shvov, vypolnennykh dugovoi svarkoi, uglero-  
distykh kotel'nykh stalei. Moskva, Gos. nauchno-tekhn.izd-vo lit-  
ry po chernoi i tsvetnoi metallurgii, 1957. 16 p. (MIRA 11:4)

1. Russia (1923- U.S.S.R.) Komitet po nadzoru za bezopasnym  
vedeniem rabot v promyshlennosti i gornomu nadzoru. TSentral'nai  
nauchno-issledovatel'skaia laboratoriya.  
(Steel--Welding) (Boilers)

*Sokolov, Vasily Stepanovich*

PHASE I BOOK EXPLOITATION

448

Sokolov, Vasily Stepanovich

Defektoskopiya materialov (Nondestructive Testing and Inspection of Materials) Moscow, Gosenergoizdat, 1957. 239 p.  
7,000 copies printed.

Ed.: Korikovskiy, I.K.; Tech. Ed.: Medvedev, L.Ya.; Scientific Eds. of the Book: Entin, S.D. of Part 1; Totochenko, L.K. of Part 2; Yakubovich, T.S. of Part 3; Sinitsyn, S.N. of Part 4.

PURPOSE: This book is intended for engineers and technical personnel and may also be useful to students of technical institutes and persons specializing in nondestructive testing of materials.

COVERAGE: This is a practical manual on nondestructive testing and inspection of materials. The author attempts to compile

Card-1/10

Nondestructive Testing and Inspection of Materials 448

in one book the most highly developed and widely employed methods in industry for detecting flaws in materials and finished products. He presents descriptions of various new ideas and gives schematic diagrams of newly developed equipment which, although not widely used in industry, has been successfully tested in laboratories. Detailed information on magnetic, penetrant, ultrasonic and radiographic methods of inspection is given. The first part of this book deals with magnetic inspection which includes magnetic-particle and magnetic-tape recording methods. According to the author the magnetic-particle inspection method is now widely used in aircraft and heavy machinery industries. The author states that general research work on magnetic-particle inspection was conducted by the magnetic laboratory of the Central Scientific Research Institute of Technology and Machinery, under the direction of N.I. Yeregin, and by the All-Union Scientific Research Institute of Aviation Materials, under the direction of A.V. Zhigadlo. Extensive research in this field is currently being conducted by the Central Scientific Research Laboratories of the Committee for the Control of Industrial Safety and Mine Inspection, USSR, where a number of new types of magnetic

Card 2/10

Nondestructive Testing and Inspection of Materials 448

flaw detectors has been developed. The magnetic-tape recording flaw detector used in inspection of welded connections, illustrated on pages 20-21, was developed by the All-Union Scientific Research Institute for Construction in the Petroleum and Gas Industry. Illustrations of several other types of magnetic flaw detectors are also given. The author concludes that the sensitivity of magnetic inspection depends on such factors as methods of magnetization, magnetizing current, depth of flaw and the size and conditions of ferromagnetic particles, and is limited to magnetic materials only. The inspection of nonmagnetic materials is often accomplished by employing fluorescent-penetrant and dye-penetrant methods. These methods of inspection are described in the second part of the book. The description includes detailed information on the techniques and equipment used in penetrant methods of inspection. The author states that the sensitivity of these methods is very high but that he lacks sufficient information to draw a conclusion about the industrial value of this method. Part three of the book summarizes the

Card 3/10

Nondestructive Testing and Inspection of Materials 448

developments of ultrasonic methods of inspection in the Soviet Union and describes principles of operation of ultrasonic flaw detectors and their practical applications. Numerous illustrations and descriptions of various types of ultrasonic flaw detectors are presented. The descriptions also include flaw detectors used in the aircraft industry. These are types 86-IM, 86-IM-2 and 86-IM-3. The fourth part of the book deals with radiographic inspection. It includes X-ray, gamma-ray, Betatron, and fluorescent and photo-fluorescent methods. The procedures and equipment used in these methods of inspection are described in detail. Safety precautions and health measures in radiographic inspection using X-ray and gamma rays are discussed. There are 153 Soviet references.

TABLE OF  
CONTENTS:

Part I. Magnetic Inspection

1-1 General observations

5

Card 4/10-

SOKOLOV, V.S.

4  
 126. APPLICATION OF ULTRASONIC DEVICES IN POWER PLANTS. SOKOLOV, V.S.  
 (Energetik (Power Eng., Moscow), May 1957, 4-5). The production of ultrasonic  
 waves by piezoelectric and electrostriction and their methods is outlined. The  
 absorption of ultrasonic sound is used as the basis of gas analyzers, of the  
 determination of humidity and dustiness of air, automatic control of intake  
 of pulverized fuel for boiler furnaces and measurement of the moisture in  
 saturated and superheated steam and of the velocity of steam through pipes.  
 A method for determination of the viscosity of liquids, e.g., lubricants is  
 outlined. Other applications of ultrasonics which are described include  
 prevention of scale formation in boilers; removal of temporary hardness in  
 boiler water; deaeration of water; coagulation of suspended particles in  
 water for chemical cleaning; improving the combustion of pulverized fuel in  
 furnaces; precipitation of suspended particles in gases; etc. (L).

LL  
 MT

SOKOLOV, N. S. Inzhener.

Ionization water level indicators used in steam boilers. Bezop. truda  
v prom. 1 no.2:24-26 F '57. (MIRA 10:4)

1. Tsentral'naya nauchno-issledovatel'skaya laboratoriya Gosgortekhnad-  
zera SSSR.

(Boilers--Safety appliances) (Liquid level indicators)



СОНОВ, В.С., инженер.

Safety measures during the examination of metals with gamma rays.  
Bezopasnost' v prom. i no. 117-21 3 1977. (MLRA 10:9)

1. Tsentral'naya nauchno-issledovatel'skaya laboratoriya  
Gosstattekhnadzera SSSR.

(Radiology, Industrial)

32-8-59/61

AUTHOR  
TITLE

Sokolov, V.S.

Critical Remarks on the Practical Handbooks on the Luminescence Defectoscopy of the Metals.

PERIODICAL

(Kriticheskiye zametki o prakticheskikh rukovodstvakh po defektoskopii metallov prosvechivaniyem - Russian)

ABSTRACT

Zavodskaya Laboratoriya, 1957, Vol 23, Nr 8, pp 1011-1014, (U.S.S.R.)

In this connection the following Soviet handbooks are named as the best: Trapeznikov, A.K., "X-Ray Defectoscopy", (1948); Rumyantsev S.V. and Grigorovich, A.Yu., "Control of quality of the metals with gamma rays" (1954); Tatochenko, L.K. and Medvedev S.V., "Industrial gammadefectoscopy" (1955) and an encyclopaedia of the Academy of Science of the U.S.S.R. "Gammadefectoscopy". The books mentioned are, however, already sold out, but are still in demand. In the article it is said that the field of X-ray defectoscopy is in the U.S.S.R. unnecessarily separated from that of defectoscopy with gamma rays although there is practically no difference. The fact of the separation led to the opinion that the application of gamma rays was something "modern" and more in the foreground, whereas roentgenology was neglected. This manifested itself in the most recent scientific works on defectoscopy, but also in the industry of the U.S.S.R., which fact is "regretted" here. Thus, the Moscow X-Ray Works have stopped constructing the X-ray apparatus of 1-2 million V all together, and changed over to the production of the gamma plants GUP - Co60, in spite of the fact that the Soviet

Card 1/2

25(1) (6)

PHASE I BOOK EXPLOITATION

SOV/1279

Sokolov, Vasilii Stepanovich, and Sergey Nikolayevich Sinitzyn

Ul'trazvuk v promyshlennosti (Ultrasonics in Industry) [Moscow]  
Moskovskiy rabochiy, 1958. 105 p. 17,000 copies printed.

Ed.: Gurov, S.; Tech. Ed.: Yakovleva, Ye.

PURPOSE: This booklet is intended for engineers and technicians working in the field of industrial ultrasonics.

COVERAGE: The booklet covers fundamental principles of ultrasonics and industrial applications of ultrasonics for such processes as: machining hard materials, non-destructive testing, checking of manufacturing processes, cleaning parts, measurement of velocity and flow of fluids, and other purposes. Various types of ultrasonic transducers and flow-detecting instruments are described. No personalities are mentioned. There are no references.

TABLE OF CONTENTS:

Card 1/3

SOKOLOV, V.S., inzh.

Modern methods for the detection of defects in metals used in  
power engineering equipment. Bezop. truda v prom. 2 no.1:19-22  
Ja '58. (MIRA 11:1)

(Metals--Testing)

SOV/96-59-10-4/22

AUTHORS: Kostyuk, A.G. (Cand.Tech.Sci.) and  
Sokolov, V.S. (Engineer)

TITLE: Electrical Modelling of Temperature Distribution in  
Turbine Rotors

PERIODICAL: Teploenergetika, 1959, Nr 10, pp 22-27 (USSR)

ABSTRACT: The axially-symmetrical temperature field of a turbine rotor may be modelled for calculation by an integrator type EGDA: it is sufficient to simulate a wedge-shaped longitudinal sector of the rotor. For use with integrator type EGDA-6/53 the model may be made of several layers of electrically conducting paper, pasted together as indicated in Fig 1. The method of selecting the radius of each layer of paper is described with reference to Fig 1a and a simple formula is given. In order to check that a suitable number of pieces of paper have been used and to determine the accuracy of the method, the results of temperature field modelling are compared with a standard based on accurate calculations of steady-state thermal conductivity for several simple solids of rotation. For example, an accurate solution of the equations of thermal conductivity for a solid cylinder with the boundary conditions indicated in Fig 2 may be

Card  
1/5

SOV/96-59-10-4/22

Electrical Modelling of Temperature Distribution in Turbine Motors

represented by a series of the form shown in Eq (1). Results obtained from the model are compared with theoretical values derived from Eq (1) in Figs 3 and 4. Fig 3 shows the temperature distribution across a disc at the centre of the cylinder, and Fig 4 the temperature distribution along the axis of the cylinder, compared with temperature values found for a four-layer model. A method of modelling the roots of turbine blading is then considered. When the blades are fixed into an annular slot it is easy to model the temperature field by selecting a strip of appropriate width and length to represent the resistance of the working part of the blading and to represent the rotor and fixing zone by means of a multi-layer wedge, as shown in Fig 1. When the ends of the blades are fitted into slots in the disc the rotor is not axially symmetrical in the fixing zone and, therefore, the temperature field of the fixing zone and of the actual rotor must be considered separately. An approximate method of modelling in this case is described on the assumption that the temperature field in the blade fixing zone is approximately uniform. It is well established that the main heat flow in the root

Card 2/5

SOV/96-59-10-4/22

Electrical Modelling of Temperature Distribution in Turbine Motors

fixing zone is directed from the periphery towards the centre. It is accordingly possible to determine the parameters of the equivalent plane model of a blade root fixing for which the law of change of temperature in a radial direction is close to the real one. Since the main heat flow in the root fixing is radial, it is necessary that the radial thermal conductivity of the fixing details should be the same for the actual part and for its plane model. This condition is given by Eq (2), which may be used to calculate the sections of the plane model at the most important sections shown in Fig 5. Fig 5 also gives in dotted lines the outline of the plane model and in chain-dotted lines the outline of the actual fixing. The requirement that the quantity of heat passing through the corresponding boundary surfaces of the actual root fixing and the plane model should be the same is represented by Eq (3) which is used to define the heat-transfer coefficient at the model surfaces. The conditions at the boundary surface between the root and the rotor are not given. To establish them and to completely determine the temperature field both in the root and in the rotor, it

Card  
3/5

SOV/96-59-10-4/22

Electrical Modelling of Temperature Distribution in Turbine Motors

is first necessary to determine the equivalent parameters of the root fixing which governs heat flow from the blade root to the rotor. These equivalent parameters are the nominal heat-transfer coefficient and the nominal temperature of the medium that govern the heat flow from the blade root to the rotor through the section considered. The method of determining these equivalent parameters is then described. The heat flow to the rotor through the surface considered is given by Eq (4), from which Eq (6) is easily derived, and this is used to calculate the equivalent parameters. From these parameters it is possible to determine the boundary conditions on the electrical model of the rotor near the blade root fixings and so to determine the temperature field of the whole rotor. Formulae used in the procedure are derived. Heat exchange through gaps left between the blade root and the rotor is then considered. Formulae (11) are given for heat removed by the air from the blade roots and hence the heat flow formulae (13) to (15) are derived. The application of the results to modelling is briefly explained.

Card  
4/5



SOV/96-59-10-4/22

Electrical Modelling of Temperature Distribution in Turbine Motors

Card  
5/5

Models comprising three or four layers give sufficiently accurate results with electrical integrator type EGDA-6/53. The method is applicable to all types of rotor.

There are 6 figures and 3 Soviet references.

ASSOCIATION: Moskovskiy energeticheskiy institut  
(Moscow Power Institute)

GUSAROV, N.N., inzh. Prinimali uchastiye: ANDREYEV, V.V., inzh.;  
RABOTNOV, B.A., inzh.; FEDOTOV, L.Ye., inzh., nauchnyy red.  
BALDIN, V.A., retsenzent; BRODSKIY, A.Ya., kand.tekhn.nauk,  
retsenzent; SAVALOV, I.G., kand.tekhn.nauk, retsenzent; LEVI,  
S.S., kand.tekhn.nauk, retsenzent; SOKOLOV, V.S., kand.tekhn.  
nauk, retsenzent; LEBEDEV, Yu.I., retsenzent; RAZUMOVA, E.D.,  
inzh., retsenzent; DOLGIKH, V.G., inzh., retsenzent; MAKSIMOV,  
K.G., red.izd-vs; PUL'KINA, Ye.A., tekhn.red.

[Provisional instructions on using gamma rays in controlling  
welded joints of reinforcements in reinforced-concrete con-  
struction elements.] Vremennaya instruktsiya po kontroliu  
svarnykh soedinenii armatury zhelezobetonnykh konstruksii  
prosvechivaniem gamma-luchami. Leningrad, Gos.izd-vo lit-ry po  
stroit., arkhitekt. i stroit.materialam, 1960. 46 p.

(MIRA 14:2)

1. Russia (1923- U.S.S.R.) Ministerstvo stroitel'stva elektro-  
stantsiy. Tekhnicheskoye upravleniye. 2. Tsentral'nyy nauchno-  
issledovatel'skiy institut stroitel'nykh konstruksiy (for Baldin,  
Brodskiy). 3. Chlen-korrespondent Akademii stroitel'stva i arkhite-  
ktury SSSR (for Baldin). 4. VNIIOMS (for Savalov, Levi). 5. Tsent-  
ral'naya nauchno-issledovatel'skaya laboratoriya Gosgortekhnadsora  
(for Sokolov). 6. Zamestitel' glavnogo sanitarnogo inspektora, Sani-  
tarnaya inspeksiya SSSR (for Lebedev). 7. TsNIP Ministerstva stroi-  
tel'stva elektrostantsiy (for Razumova). 8. Trost Sevsapenergo-  
montazh (for Dolgikh).

(Gamma rays--Industrial applications) (Reinforcing bars--Welding)

PHASE I BOOK EXPLOITATION

SOV/4267

Sokolov, Vasilii Stepanovich

Kontrol' bez razrusheniya detaley (Nondestructive Inspection of Machine Parts)  
[Moscow] Moskovskiy rabochiy, 1960. 94 p. 5,500 copies printed.

Ed.: S. Gurov; Tech. Ed.: S. Pavlova.

PURPOSE: This book is intended for technical personnel dealing with nondestructive inspection of machine parts.

COVERAGE: The author discusses modern methods of detecting subsurface defects in machine parts. He describes nondestructive inspection methods and explains their application in industry. The X-raying of materials, ultrasonic flaw detection, magnetic and electric methods of inspection, and the luminescence method of flaw detection are discussed. No personalities are mentioned. There are no references.

TABLE OF CONTENTS:

X-Raying of Materials

Card ~~1/3~~

7

PHASE I BOOK EXPLOITATION

SOV/5772

Sokolov, Vasilii Stepanovich

Izotopy v avtomatike (Isotopes in Automation) [Moscow] Moskovskiy rabochiy, 1961.  
126 p. 8000 copies printed.

Ed.: S. Gurov; Tech. Ed.: S. Pavlova.

PURPOSE: This book is intended for the general reader interested in the applications of radioactive isotopes to automation.

COVERAGE: The book discusses in simple, popular language the applications of radioactive isotopes in process instrumentation which facilitate the automation of many industrial processes in different branches of the Soviet economy. No personalities are mentioned. There are no references.

TABLE OF CONTENTS:

What Are Isotopes?

3

Card 1/3

PHASE I BOOK EXPLOITATION

SOV/6001

BR

Sokolov, Vasily Stepanovich

Defektoskopiya materialov (Detection of Flaws in Materials) 2d ed.,  
rev. Moscow, Gosenergoizdat, 1961. 326 p. 8000 copies printed.

Scientific Eds.: T. Ya. Gorazdovskiy, Candidate of Technical Sciences,  
N. V. Khimchenko, Candidate of Technical Sciences, and  
L. K. Tatochenko, Candidate of Technical Sciences; Ed. of Publish-  
ing House: I. L. Iglitsyn; Tech. Ed.: G. Ye. Larionov.

PURPOSE: This manual is intended for technical personnel and may  
also be useful to students at schools of higher and secondary  
technical education who are studying flaw-detection methods.

COVERAGE: The manual deals with nondestructive methods for the con-  
trol of material quality in industry. The most widely used methods  
of flaw detection (including the magnetic, dye-penetrant, fluor-  
escent, ultrasonic, x-ray, and  $\gamma$ -ray methods) are described. In-  
formation is given on flaw detectors and flaw-detection methods  
which are currently being used or will shortly find wide practical

Card 1/1

SOLOV, V.S.

PHASE I BOOK EXPLOITATION

SOV/5486

Vsesoyuznoye soveshchaniye po vnedreniyu radioaktivnykh izotopov i yadernykh izlucheni v narodnoye khozyaystvo SSSR. Riga, 1960.

Radioaktivnyye izotopy i yadernyye izlucheniya v narodnom khozyaystve SSSR; trudy soveshchaniya v 4 tomakh. t. 1: Obshchiye voprosy primeneniya izotopov, pribory s istochnikami radioaktivnykh izlucheni, radiatsionnaya khimiya, khimicheskaya i neftepererabatyvayushchaya promyshlennost' (Radioactive Isotopes and Nuclear Radiations in the National Economy of the USSR; Transactions of the Symposium in 4 Volumes. v. 1: General Problems in the Utilization of Isotopes; Instruments With Sources of Radioactive Radiation; Radiation Chemistry; the Chemical and Petroleum Refining Industry) Moscow, Gostoptekhizdat, 1961. 340 p. 4,140 copies printed.

Sponsoring Agency: Gosudarstvennyy nauchno-tekhnicheskyy komitet Soveta Ministrov SSSR, and Gosudarstvennyy komitet Soveta Ministrov SSSR po ispol'zovaniyu atomnoy energii.

Ed. (Title page): N.A. Petrov, L.I. Petrenko and P.S. Savitskiy; Eds. of this Vol.: L.I. Petrenko, P.S. Savitskiy, V.I. Sinitsin, Ya. M. Kolotyrkin, N.P. Syrkus and R.F. Romm; Executive Eds.: Ye. S. Levina and B. F. Titskaya; Tech. Ed.: E.A. Mukhina.

Card 1/12

...accompany some of the

Radioactive Isotopes (Cont.)

SOV/5486

TABLE OF CONTENTS:

GENERAL PROBLEMS OF THE USE OF ISOTOPES

Savitskiy, P.S. [Present] State and Prospects of the Utilization of Radioactive Isotopes and Nuclear Radiation in the National Economy	7
Gayle, G.I., and V.P. Dubovich. Experience Obtained in Introducing Isotopes and Nuclear Radiation in Enterprises of the Council of the National Economy of the Latvian SSR	15
Mikheyev, G.F. Economic Efficiency of the Industrial Use of Radioactive Isotopes and Nuclear Radiation	21
<u>Sokolov, V.S.</u> Prospects of Using Instruments and Apparatus With Radioactive Radiation Sources for the Automation of Production Processes in the Individual Branches of Industry	35

Card-3/-12

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27139  
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D231/D304

AUTHOR: Sokolov, V.S., Engineer  
TITLE: Up-to-date methods of defectoscopy  
PERIODICAL: Priborostroyeniye, no. 9, 1961, 16-20

TEXT: This article describes the following methods of defectoscopy: the X- and gamma-ray, ultrasonic, magnetic electromagnetic, eddy current and luminescence method. In 1960 the "Mosrentgen" factory commenced production of a portable 120 kV X-ray apparatus which enabled the application of radioscopy methods in factories. A 400 kV apparatus ("PYM-3") ("RUP-3") suitable for X-raying articles of 100 mm wall thickness. In the USSR the betatrons used in industry develop 10, 15, 25, 30 and 50 million electron-volts. They are used in the material quality control of steel articles of up to 500 mm wall thickness. The Tomsk Polytechnic Institute developed a "stereobetatron" emitting two X-ray beams at an angle to each other. This design enabled the search and location of defects in metal

Card 1/4



27139  
S/119/61/000/009/002/003  
D231/D304

Up-to-date methods of defectoscopy

articles. It is not, however, widely used. The high voltage X-ray apparatus are being designed. As far as the radioactive sources for industrial purposes are concerned the gamma-emitting cobalt-60 was chiefly used previously. Recently, however, isotopes cesium-137, iridium-192 and thulium-170 have been widely used. In addition, experiments with europium-152-154, selenium-75, strontium-90 and others were carried out. Strontium-90 emits beta-particles the retardation of which in substances of the type: lead, uranium etc. produces wide spectrum energy X-rays having a maximum in the region of 100 kiloelectron-volts. They are used for the purpose of X-ray-ing thin-walled articles. P.V. Timofeyev and V.V. Sorokina of the All-Union electrotechnical institute designed an electron-optical transducer which is very useful in the mechanization and automation of material control by X-ray method. Luminescent radiation indicators may prove very useful in the automation of the process control. The ray-beam, having passed through the object under test, acts on a luminescent crystal and brings about its luminescence. The crystal, being in contact with a photoelectric multiplier FEY (FEU),

Card 2/4

27139

S/119/61/000/009/002/003

D231/D304

Up-to-date methods of defectoscopy

produces electric impulses which are recorded. An apparatus, type P-4 (R-4) is based on this principle of operation. The ultrasonic method of quality control is based on the reflection of ultrasonic oscillations from the boundary of two mediums having different acoustic properties. An automatic ultrasonic "immersion" system for the detection of defects in rolled sheets was developed in Professor S.Ya. Sokalov's electrotechnical laboratory of the Leningrad Electrotechnical Institute im. Lenin. In this system, the sheets under test enter a water bath and pass between the emitting and receiving piezoelectric transmitter plates. The electrical impulses from the plate are amplified and recorded on an electro-thermal paper. Thus a visible image of defects is obtained in a required scale. The electric impulses are also passed to an automatic sorting device. An "immersion" ultrasonic system was developed in LHMMA (TsNIITMASH) for inspection of thin-walled tubes of small diameter. In order to convert the ultrasonic oscillations into a visible image a special very sensitive electronic-acoustic transducer was designed. The eddy current method of quality con-

Card 3/4

Up-to-date methods of defectoscopy

27139  
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D231/D304

trol is based on the formation of eddy currents in a metal under test and measurement of their effect on the exciting coil. Due to the high sensitivity of eddy currents to changes in physical, chemical and other properties of materials and to the absence of contacts this method received great attention. Several types of eddy current defectoscopes have been developed in the USSR, viz: types ЭМД-1 (EMID-1), EMID-2, EMID-3 and EMID-5. For the purpose of quality control of welded joints in pipes and boilers a magnetographic method has been devised. In this method of defectoscopy the results are recorded on a magnetic tape. The method is based on the utilization of the magnetic field dispersion in a defective region. The scattered magnetic flux formed by the defective area is recorded. One of the disadvantages of this method is the likelihood of receiving false signals if the tape is not close enough to the surface of the welded seam. ВВМСТ (NIIST), Moscow has developed a method for converting electrical impulses obtained from the tape into a visible image similar to that obtained in the ultrasonic method of defectoscopy. There are 8 figures. ✓

Card 4/4

SOKOLOV, V. S., Cand Tech Sci (diss) -- "Investigation of the effect of design parameters of a TsNIDI chamber on the indexes of the working process of a four-stroke transport Diesel". Leningrad, 1960. 15 pp (Min Higher and Inter Spec Educ RSFSR, Leningrad Polytech Inst im M. I. Kalinin), 150 copies (KL, No 11, 1960, 134)

BAYKOV, B.P : SOKOLOV, V.S.

Practice of the Central Research Institute of Diesel Engines in  
constructing experimental stands for investigating operating  
processes of diesel engines. TRUDY TSNIDI no.39:23-38 '60.  
(MIRA 15:8)

(Diesel engines--Testing)

IVANCHENKO, N.N.; SOKOLOV, V.S.; STANKEVICH, V.V.

Pressure charging of diesel engines having chambers in pistons.  
Trudy TSNIDI no.40:67-80 '60. (MIRA 15:8)  
(Diesel engines)

SOKOLOV, V.S., inzh.; LAZAREV, A.A., inzh.; POPOV, V.N., kand.tekhn.nauk;  
TARASOV, A.N., inzh.; POTAPOV, Yu.A., inzh.

Results of using the TSNIDI combustion chamber for KDM diesel tractors.  
Trakt. i sel'khoz mash. 30 no.9:15-17 S '60. (MIRA 13:9)

1. Tsentral'nyy nauchno-issledovatel'skiy dizel'nyy institut (for Sokolov). 2. Chelyabinskiy traktorny zavod (for Potapov).  
(Diesel engines)

BORDUKOV, V.T.; SOKOLOV, V.S.; LAZAREV, A.A.; POPOV, V.N.

Gas-turbine pressure charging of KIM diesel tractor engines. Trakt.  
i sel'khoz mash. 30 no. 12:5-8 D'60. (MIRA 13:12)

1. Tsentral'nyy nauchno-issledovatel'skiy dizel'nyy institut,  
Leningrad (for Bordukov, Sokolov). 2. Chelyabinskiy traktornyy  
zavod (for Lazarev, Popov).  
(Diesel engines)



IVANCHENKO, N.N., kand.tekhn.nauk; SOLOV, V.S., kand.tekhn.nauk

Adjusting the performance of diesel engines with a combustion chamber  
designed by the Central Research Institute for Diesel Engine. Trakt. i  
sel'khozmach. 31 no.3:5-6 Mr '61. (MIRA 14:3)

(Diesel engines--Testing)

BAYKOV, B.P., kand.tekhn.nauk; BORDUKOV, V.T., inzh.; SOKOLOV, V.S., kand.  
tekhn.nauk; LAZAREV, A.A., inzh.; POPOV, V.N., knad.tekhn.nauk;  
SUKHOV, Ye. I., inzh.

Results of turbocharging of the KDM-100 engines. Izv.vys.ucheb.  
zav.; mashinestr. no.5:37-46 '62. (MIRA 15:10)

1. TSentral'nyy nauchno-issledovatel'skiy dizel'nyy institut  
i Chelyabinskiy traktorny zavod.  
(Tractors—Engines—Superchargers)

SCFOLOV, V. S. & TUDOROV, A. A.

"Botanical Institute Named After V. L. Komarov of the Academy of Sciences of USSR" Leningrad 1947. 1 copy. Descriptive pamphlet.

SOKOLOV, V. S.

PA5/49T74

USSR/Medicines - Plants  
Medicine - Cold, Effects

Jul 48

"Effect of Temperature on the Alkaloid Content of  
Plants," V. S. Sokolov, 2½ pp

"Priroda" No 7

Briefly describes effects of temperatures below 0° C  
on the alkaloid content of plants during final stages  
of vegetation.

5/49T74

SOKOLOV, V.S.

"First Monographic work on alkaloids and glucosides in Russia", Priroda, No.1, 1949.

32167. SOKOLOV, VLADIMIR SERGE-  
EVICH, 1905- . Alkaloidonosnye ras-  
teniia SSSR. Moskva-Leningrad, Izd-vo  
Akad. nauk SSSR, 1952. 378 p. illus.,  
text map. (Akademiia nauk SSSR.  
Botanicheskii institut. Monografii po  
syr'evym gruppam rastenii) approx. 900  
refs. *Title tr.:* Alkaloid plants of the  
U.S.S.R.

*Includes* (p. 159-282) a systematic  
list of about 500 species, native to  
northern regions of the U.S.S.R. Brief  
descriptive notes and data on alkaloid  
content, toxicity, uses in medicine and

*at head of title;*

AKAD. Sci SSSR, BOTANICHESKII INST.

32167 Cont'd

industry and geographic distribution are given. Alkaloid plants arranged by the regions of the *Flora SSSR* are presented, p. 282-309. This section includes a list of ten arctic plants (table 53, p. 283), some scattered species in northern regions of European U.S.S.R. and Siberia, and at least ten species native to Kamchatka Peninsula (table 58, p. 301-303). Indexes of the families and Russian and Latin names are appended. *Copy seen: MH-A.*

SOHLON, V. I.

2436

SOHLON, V. I. Sushchestivuet li vzaimozavisimost' mezhdu alkaloidnosost'yu i zfirmo-naslichnost'yu rasteniy? Priroda, 1949, No. 7, S. 60-62.  
Bibliogr: 13 Nazv.

CC: Letopis, No. 32, 1949.



155T10

USSR/Biology - Plants  
Alkaloid Plants

Dec 49

"Some Problems on the Alkaloid Content of Plants,"  
V. S. Sokolov, 1 p

"Priroda" No 12

Digest of paper submitted by Sokolov for doctorate at Bot Inst Imeni Komarov, 18 May 49. Mentions that alkaloid-containing plants have been found very useful in medical, veterinary, and agricultural fields and in many branches of industry (dye industry, home decoration industry, etc). Points out studies by A. A. Grossgeym on geographical distribution of

155T10

USSR/Biology - Plants (Contd)

Dec 49

alkaloidal plants. Says alkaloid content of plant may serve as means of determining morphological classification.

SOKOLOV, V. S.

155T10

SOKOLOV, V.S.: BALOBIN V.N.

Arboriculture

Growth of tree and shrub varieties in stands of varying density. V.N. Balobin, V.S. Sokolov  
Agrobiologiya No3, 1952. Kafedra darvinizma Moskovskogo gosudarstvennogo universiteta  
imeni M.V. Lomonosova

SO: Monthly List of Russian Accessions, Library of Congress, Sept 52 1952, Uncl.

U. S. V. V. .

Honeysuckle

Accelerated stratification of the seeds of Tatar honeysuckle, Les. Khokh., 5, No. 3, 1952.

Monthly List of Russian Accessions, Library of Congress, November 1952. UNCLASSIFIED

1. SOKOLOV, V. S.
2. USSR 600
4. Pine
7. Growth of pine spot-seeded in varying concentrations, Agrobiologiya, No. 6, 1952.

9. Monthly List of Russian Accessions, Library of Congress, April 1953, Uncl.

1. SOKOLOV, V. S.
2. USSR (600)
4. Botanists
7. In memory of H. N. Monteverde. Bot.zhur. 37 no. 6, 1952.
9. Monthly Lists of Russian Accessions, Library of Congress, March 1953, Unclassified.

BAKHTEYEV, F.Kh.; SOKOLOV, V.S., doktor biologicheskikh nauk, redaktor.

[Problems in the ecology, phylogeny and breeding of barleys  
(Hordeum L. sectio Crithe Doll)] Problemy ekologii, filogenii i  
selektzii iachmenei (Hordeum L. sectio Crithe Doll). Moskva, Izd-  
vo Akademii nauk SSSR, 1953. 217 p. (MLRA 7:3)  
(Barley)

BOKOLOV, V. S., Dr.

Botany, Medical

Review of "Cultivation of medicinal plants." Apt. delo 2, No. 1, 1953.

9. Monthly List of Russian Accessions, Library of Congress, June 1953, Uncl.

1. КОХЛОУ, В. Г.
2. USSR (600)
4. Tree Planting
7. Presowing preparation of seeds and scientific practices for sowing them.  
Les. khoz., 6, No. 1, 1953.

9. Monthly List of Russian Accessions, Library of Congress, May 1953. Unclassified.



SOKOLOV, V.S.

Gentiana lutea L. and Arnica montana. Bot. zhur. 39 no.5:759-763  
S-0 '54. (MLBA 7:1)

1. Botanicheskiy institut im. V.L.Komarova Akademii nauk SSSR,  
Leningrad.  
(Arnica) (Gentians) (Botany, Medical)

USSR/Biology - Botany

Card 1/1      Pub. 124 - 9/40

Authors      : Sokolov, V. S.

Title        : ~~XXXXXXXXXXXXXXXXXXXX~~  
New valuable ensilage plants

Periodical   : Vest. AN SSSR 1, 49-51, Jan 1955

Abstract     : The discovery of new ensilage plants containing albumina, carbohydrates, mineral substances and primary vitamin A-carotin is announced by the Ministry of Agriculture of the USSR. The ensilage plants were found mostly in the Caucasus, Sakhalin and Altay regions.

Institution   : .....

Submitted    : .....

SOKOLOV, V. S., prof., doktor biologicheskikh nauk

Medicinal plants at the service of the public health. Apt.delo 4  
no.1:36-38 Ja-F '55 (MLPA 8:4)

(PLANTS,  
medicinal, prod. in Russia)

SOKOLOV, V.S.

*Rhaponticum carthemoides* (Willd.) Iljin cultivated in Northern  
Russia. Trudy Bot. inst. Ser.6 no.4:264-271 '55. (MLPA 9:2)  
(Russia, Northern--Carduaceae)

SOKOLOV, V.S., doktor biologicheskikh nauk.

New valuable forage plants. Vest. AN SSSR 25 no.1:49-51 Ja '55.  
(Forage plants) (MIRA 8:3)

SOKOLOV, V.S., doktor biologicheskikh nauk, professor, redakter; SOKOLOV, S.Ya., doktor biologicheskikh nauk, professor, redakter; IL'IN, M.M., doktor biologicheskikh nauk, professor, redakter; KONOVALOV, I.N., doktor biologicheskikh nauk, professor, redakter; SATSYPEROVA, I.F., kandidat farmatsevticheskikh nauk, redakter.

[New useful plants; recommendations of the all-Union conference on the introduction of new useful plants into cultivation] Novye poлезnye rasteniia; rekomendatsii Vsesoiuznogo soveshchaniia po vvedeniiu novykh poлезnykh rastenii v kul'turu. Moskva, 1956. 67 p. (MLRA 9:6)

1. Akademiya nauk SSSR. Botanicheskiy institut.  
(Plant introduction) (Plants, Cultivated)

SOKOLOV, V.S., doktor biologicheskikh nauk.

Cultivation of new commercial plants (Meeting in the V.L. Komarov  
Botanical Institute). Vest.AN SSSR 26 no.5:102-103 My '56.

(MLRA 9:8)

(Botany, Economic)

*Sokolov, V.S.*

Category: USSR/General Division. Congresses. Meetings. Conferences. A-4

Abs Jour: Referat Zh.-Biol., No 6, 25 March 1957, 21359

Author : Sokolov, V.S.

Inst : not given

Title : The All-Union Conference on Introduction into Cultivation  
of Useful Plants.

Orig Pub: Botan. zh., 1956, 41, No 5, 770-775

Abstract: A brief account of the conference from January 30 to February 3, 1956, in Leningrad; 400 individuals were present. In plenary sessions and 5 sections more than 160 reports were read, embracing very varied problems, beginning with evolution and ending with agrotechnique of plants, suggested for introduction and acclimatization in the USSR. The basic problem of the conference was the tabulation of new useful plants for prospective cultivation and wide experimentation. The conference discussed and passed a resolution in which it summarized the basic results of the conference.

Card : 1/1

-17-



SOKOLOV, V.S., doktor biologicheskikh nauk.

Introduce cultivation of new and useful plants. Priroda 45 no.5:  
109 My '56. (MLRA 9:8)

1. Botanicheskiy institut imeni V.L. Komarova Akademii nauk SSSR.  
(Plants)

EYKHE, E.P.; SOKOLOV, V.S., professor, doktor biologicheskikh nauk,  
otvetstvennyy redaktor; SHCHERBINA, T.S., redaktor izdatel'stva;  
KRUGLIKOVA, N.A., tekhnicheskiiy redaktor

[Topinambou or Jerusalem artichoke; principles of its cultivation  
and its significance for the national economy] Topinambur ili zemlia-  
naia grusha; osnovy vozdeleyvaniia i narodnokhoziaistvennoe zhachenie.  
Moskva, Izd-vo Akademii nauk SSSR, 1957. 190 p. (MLRA 10:3)

1. Chlen-korrespondent Akademii nauk Latvyskoy SSR (for Eykhe)  
(Jerusalem artichoke)

*Sokolov*  
UTKIN, L.A.; GAMMERMAN, A.F.; NEVSKIY, V.A.; SOKOLOV, V.S., otvetstvennyy  
redaktor; LEBEDEV, D.V., otvetstvennyy redaktor; TAMISOV, G.A.,  
redaktor izdatel'stva; TVERITINOVA, K.S., tekhnicheskii redaktor

[Bibliography on medicinal plants; an index to Russian literature.  
Manuscripts from the 17th to the 19th century, printed works from  
1732 to 1954] Bibliografiia po lekarstvennym rasteniiam; ukazatel'  
otchestvennoi literatury. Rukopisi XVII-XIX vv., pechatnye izdaniia  
1732-1954 gg. Moskva, Izd-vo Akad. nauk SSSR, 1957. 724 p.  
(Bibliography--Botany, Medical) (MIRA 10:4)

SOKOLOV, V. S.

"Alkaloid-Verkommen und Dynamik der Alkaloid-Bildung in Pflanzen," Angewandte Chemie, 7 Jan 1957, p. 66.

Abstract in German

SOURCE : U.S.S.R.  
 ORIGIN : On Improved Planting Grains. Leningrad State  
Tropical Center.  
 JOURNAL : Bel. zhurn. biologiya, No. 5, 1957, No. 20170  
 AUTHOR : Starovoytov, K.T.; Sokolov, V.S.  
 INST. : Inst. of Socialist Agric.; AS Belorussian SSR  
 TITLE : Certain Problems in Corn Agrotechny in the  
Northern Districts of Belorussian SSR.

ORIG. PUB.: V. sb.: Kukuruzn v BSSR, Minsk, AN BSSR, 1957, 232-

SUMMARY : Data gathered by the Institute of Socialistic  
 Agriculture of the Academy of Sciences Belorussian SSR in the study and development of  
 methods of cultivating corn (sowing times and  
 depth of planting of the seeds, mulching the  
 plantings, methods of seed preparation, prob-  
 lems of maintenance of the plantings, the  
 application of organic and mineral fertilizers,  
 the bed areas and density of the stands, arti-  
 ficial pollination, etc.) on the turf-Podzolic

CLASS: 1/3

SOKOLOV, V.S.

International Congress on the Physiology and Biochemistry of  
Alkaloids. Izv. AN SSSR. Ser. biol. no. 5:642-644 S-O '57.  
(MIRA 10:10)  
(QUEDLINBURG, GERMANY--ALKALOIDS--CONGRESSES)

SOKOLOV, V.S.

The work of Estonian botanists and silviculturists during the period from 1947 to 1956 and partially, during the preceding years. Bot. zhur. 42 no.1:146-153 Ja '57. (MLRA 10:2)

1. Botanicheskiy sad Akademii nauk Latvyskoy SSR, Riga.  
(Estonia--Botanical research)

SOKOLOV, V.S.

Excursion to the German Democratic Republic. Bot.zhur. 42 no.10:1556-1562  
0 '57. (MIRA 10:10)

1. Botanicheskiy institut im. V.L.Komarova AN SSSR, Leningrad.  
(Quedlinburg, Germany--Alkaloids--Congresses)  
(Germany, East--Biological research)



IL'IN, M.M., otvetstvennyy red.; SHUKHOBOODSKIY, B.A., otvetstvennyy red.;  
VASIL'YEV, V.N., prof., red.; PIGULEVSKIY, G.V., prof., red.;  
SOKOLOV, V.S., prof., red.; FEDOROV, A.A., prof., red.;  
BRIKINA, M.A., red. izd-va; PRVZNER, R.S., tekhn. red.

[Present condition and prospects for the study of plant resources  
of the U.S.S.R.] Sostoianie i perspektivy izucheniia rastitel'nykh  
resursov SSSR. Moskva, 1958. 510 p. (MIRA 11:9)

1. Akademiya nauk SSSR. Botanicheskiy institut.  
(Botany, Economic)

COUNTRY	: USSR	
CATEGORY	: Cultivated Plants. Cereals.	M
REF	: Zhurnal, No. 11, 1953, No. 61763	
AUTH	: <u>Dapko, A. I., Sokolov, V. S.</u>	
INCL	: -	
TITLE	: Width of the Space Between the Rows in Checkrow Planting.	
ORIG. PUB.	: Kukuruz, 1953, No. 1, 41-42	
ABSTRACT	: No abstract.	

Card: 1/1

✓ USSR / Cultivated Plants. Grains. Legumes. Tropical M-1  
Cereals.

Abs Jour : Ref Zhur - Biologiya, No 2, 1959, No. 6234

Author : Lappo, A. I.; Sokolov, V. S.  
Inst : Bielorussia Agricultural Institute  
Title : Depth of Cultivation Between Rows of Corn  
Sowings in the Non-Chernozem Belt

Orig Pub : Vest. s.-kh. nauki, 1958, No 4, 45-48

Abstract : Experiments were carried out at the Bielorussian  
Agricultural Institute on sandy loam, medium  
and heavy argillaceous loams in 1955-1957.  
Minnesota 13 extra corn was sown according to  
the square-pocket method (70 x 70 cm). Culti-  
vation was carried out three times in two  
directions. Deep mellowing on 10-12 cm during  
the whole period gives negative results. The

Card 1/2

✓ USSR / Cultivated Plants. Grains. Legumes. Tropical M-1  
Cereals.

APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001652110001-4"

Abs Jour : Ref Zhur - Biologiya, No 2, 1959, No. 6234

best results were obtained with shallow culti-  
vation on 4-6 cm. Hilling gave positive re-  
sults only on light soils during a moist  
summer; it is harmful on heavy soils. The main  
reason for the lowering of yields in case of  
cultivation between rows is the damage inflicted  
to the roots. It is recommended to use shallow  
cultivation which is sufficient for destroying  
weeds and safe for corn roots. -- B. I. Kazachek

Card 2/2

Cultivated Plants. Grains. Legumes. Tropical  
Cereals.  
Abs Jour : Ref Zhur - Biologiya, No. 1, 1959, No. 1634

Author : Sokolov, V. S.

SOKOLOV, V.S.; SANDINA, I.B.; KOLPIKOV, V.A.; MEDVEDEV, P.F.

Experiment in raising *Heracleum Sosnowskyi* Mend. as a new silage  
plant in Leningrad Province. Trudy Bot. inst. Ser. 6:244-261  
'58. (MIRA 11:10)

(Leningrad Province--Cow parsnip)

SOKOLOV, V.S.; SAAKOV, S.G.

▲ visit to the Bulgarian People's Republic. Bot. zhur. 43 no. 5:736-  
742 My '58. (MIRA 11:7)

1. Botanicheskiy institut im. V.L.Komarova Akademii nauk SSSR,  
Leningrad.

(Bulgaria--Botany, Economic--Research)

SOKOLOV, V.S.

Immediate tasks in the introduction of new useful plants. Trudy  
Bot.inst.Ser.6 no.7:22-27 '59. (MIRA 13:4)

1. Botanicheskiy institut im. V.L.Komarova AN SSSR. (BIN),  
Leningrad.

(Plant introduction)

SOKOLOV, V.S.

Introduction of *Leuzea carthamoides* DC. Trudy Bot.inst.Ser.6  
no.7:295-297 '59. (MIRA 13:4)

1. Botanicheskiy institut im. V.L.Komarova AN SSSR (BIN),  
Leningrad.  
(Leningrad Province--Leuzea)

SOKOLOV, V.S.

International Conference on Medicinal and Useful Plants. Izv. AN  
SSSR Ser.biol. 24 no.1:147-151 Ja-F '59. (MIRA 12:2)  
(WAGENINGEN--BOTANY, MEDICAL--CONGRESSES)



SOKOLOV, V.S.

International Conference on Medicinal and Useful Plants in the  
Netherlands. Bot. zhur. 44 no.1:145-148 Ja '59. (MIRA 12:1)

1. Botanicheskiy institut imeni V.L. Komarova AN SSSR, Leningrad.  
(Wageningen--Botany, Economic--Congresses)

SOKOLOV, V.S.

At the 13th Symposium of the Society of Experimental Biology,  
Reading (England), 1958. Bot.zhur. 44 no.11:1682-1687  
N '59. (MIRA 13:4)

1. Botanicheskiy institut im. V.L.Komarova Akademii nauk  
SSSR, Leningrad.  
(Botany--Congresses)

SOKOLOV, V.S., kand.biol.nauk

Some biological features of the germination of seeds of trees  
and shrubs. Vestsi AN BSSR. Ser.bial.nau. no.1:40-47 '60.  
(MIRA 13:6)

(GERMINATION)

1977, 1978

Determining the limiting coefficient of tree and shrub growth.  
Soil. mech. ra. no. 1:67-72 '60. (MIRA 14:10)  
(Plants-Water requirements)

SOKOLOV, V.S.

Germination characteristics of tree and shrub seeds. Shor.  
nauch. rab. TSBS no.1:78-84 '60. (MIRA 14:10)  
(Germination)  
(Trees)  
(Shrubs)

SOKOLOV, V.S. [Sokalan, V.S.]

Effect of soil moisture on the germination of tree and shrub seeds.  
Vestsi AN BSSR. Ser. biial. nav. no. 4:26-32 '60. (MIRA 14:1)  
(Trees) (Germination) (Soil moisture)

SOKOLOV, V.S., kand.biologicheskikh nauk

Soils and fertilizers on corn fields with record-breaking yields.  
Zemledelie 8 no.6:71-73 Je'60. (MIRA 13:10)

1. Belorusskiy nauchno-issledovatel'skiy institut zemledeliya.  
(Corn (Maize)--Fertilizers and manures)

SOKOLOV, V.S., doktor biologicheskikh nauk; IL'IN, G.S., kand. biologicheskikh nauk

Second International Symposium on the Biochemistry and Physiology  
of Alkaloids. Vest. AN SSSR 30 no.8:106-107 Ag '60. (MIRA 13:8)  
(Alkaloids)



SOKOLOV, V.S.

Effect of gibberellin on the growth of seedlings in some varieties  
of trees and shrubs. Sbor. nauch. rab. TSBS no.2:25-38 '61.

(MIRA 15:7)

(Gibberellin) (Woody plants)

SOKOLOV, V.S.; NIKITIN, A.A.; FEDOROV, Al.A.

Rhaponticum carthamoides (DC) Iljin as a valuable medicinal plant.  
Trudy Bot. inst. Ser. 5 no.9:347-363 '61. (MIRA 15:1)  
(Sayan Mountains--Centaurea) (Stimulants)

SOKOLOV, V.S.; SATSYPEROVA, I.F.

Plants as sources of new medicinal preparations and their  
introduction into cultivation. Trudy Len. khim.-farm. inst.  
12:351-359 '61. (MIRA 15:3)

1. Botanicheskiy institut imeni Komarova AN SSSR i kafedra  
farmakognozii i botaniki Leningradskogo khimiko-farmatsevti-  
cheskogo instituta.

(BOTANY, MEDICAL)  
(PLANT INTRODUCTION)

SOKOLOV, V.S.; IL'IN, G.S.

Second symposium on alkaloid biochemistry and physiology. Izv.  
AN SSSR. Ser. biol. 26 no.1:158-162 Ja-F '61. (MIRA 14:3)  
(ALKALOIDS) (PLANT PHYSIOLOGY)

SOKOLOV, V.S.; IL'IN, G.S.

Second symposium on alkaloid biochemistry and physiology in the  
German Democratic Republic. Bot. zhur. 46 no.4:608-612 Ap '61.

(MIRA 14:3)

1. Botanicheskiy institut im. V.L.Komarova Akademii nauk SSSR,  
Leningrad, i Institut biokhimii im. M.N.Bakha Akademii nauk  
SSSR, Moskva.

(Plant physiology) (Germany, East--Alkaloids--Research)

SOKOLOV, V.S. [Sokalau, V.S.]

Effect of gibberellin on seed germination and seedling growth in  
trees and shrubs. Vestsi AN BSSR.Ser.bial.nav. no.2:27-34 '62.  
(MIRA 15:8)

(GIBBERELLIN) (GERMINATION) (WOODY PLANTS)

SOKOLOV, V.S., doktor biolog.nauk; SOKOLOV, P.D., kand.biolog.nauk

Study and use of tanning plants. Vest. AN SSSR 32 no.5:123-124  
My '62. (MIRA 15:5)

(Tanning materials)

SOKOLOV, V.S.; SATSYPEROVA, I.F.

Protection of medicinal plants concerns the entire nation. Bot.  
zhur. 47 no.2:218-222 F '62. (MIRA 15:3)

1. Botanicheskiy institut imeni V.L.Komarova AN SSSR, Leningrad.  
(BOTANY, MEDICAL)



SKOLOV, V.S.

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